

Japanese Unexamined (*Kokai*) Patent Publication No. H3-10547, published January 18, 1991; Application No. H1-145899, filed June 8, 1989; Inventor: Atsushi MURAMATSU; Assignee: Matsushita Denki Sangyo KK [Matsushita Electric Industrial Co., Ltd.]

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## COMMUNICATION CONTROL DEVICE

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### 2. Claim

Communication control device whereby a terminal is connected through a line, and a means is provided whereby a telegram message transmitted to the terminal is divided into appropriate lengths and sent to the aforementioned line.

### 3. Detailed Explanation of the Invention

#### [Field of Use in Industry]

The present invention concerns a communication control device used for the control of communications and the like between a host computer and a terminal.

#### [Prior Art Technology]

Figure 2 shows the flow of a telegram message between a host computer and a terminal when a conventional communication control device is used. In Figure 1, (1) is a host computer, (2) is a communication control device, (3) is a terminal, (4) is a circuit between the communication control device and the terminal, and (5) is a telegram message.

#### [Problem the Invention is Meant to Resolve]

However, with the aforementioned conventional communication control device, because the telegram message received from the host computer is transmitted in an unchanged state to the terminal, when communication obstructions are generated, the

resending units become part of the telegram message itself. Therefore, when the quality of the line (4) in Figure 2 is poor, there is a problem in that the communication effectiveness in resending decreases greatly.

The present invention resolves these types of conventional problems, and the objective is for a significant decrease in communication effectiveness not to occur, even when the quality of the line is poor.

#### [Means for Resolving Problems]

In order to achieve the aforementioned objective, a transmitting function is provided to a communication control device whereby, when a telegram message sent from the host computer is transmitted to a terminal, the telegram message is divided into appropriate lengths based on the quality of the line.

#### [Operation]

Therefore, based on the present invention, because the telegram message is divided and transmitted, the operation is such that a significant decrease in the communication quality based on resending when the quality of the line is poor can be prevented.

#### [Embodiment]

Figure 1 shows the composition of an embodiment of the present invention. In Figure 1, (11) is a host computer, (12) is a communication control device, (13) is a terminal, (14) is a line between the communication control device and the terminal, (15) is a telegram message, and (16) is part of a divided telegram message.

The operation of the aforementioned embodiment is explained next. With the aforementioned embodiment, with the host computer (11), the generated telegram

message is divided into three sections at the communication control device (12), and is transmitted to the terminal (13) after passing through the line (14). Even if communication trouble is temporarily generated in the line (14), resending of one of the three divided sections of the telegram message can be carried out. Compared to the conventional method of resending the entire telegram message, the result is that the resending time can be made short.

#### [Results of the Invention]

As has been made clear from the aforementioned embodiment, with the present invention, a telegram message is divided into suitable lengths and transmitted based on the quality of the line used for communication with the terminal in a communication control device, and because resending is carried out for part of the telegram message when communication trouble is generated, the advantages are that the resending time is made short, and a significant decrease in the communication quality based on resending when the quality of the line is poor can be prevented.

#### 4. Simple Explanation of the Drawings

Figure 1 is a summary block diagram of the flow of a telegram message in an embodiment of the present invention, and Figure 2 is a summary block diagram of the flow of a telegram message when a conventional communication control device is used.

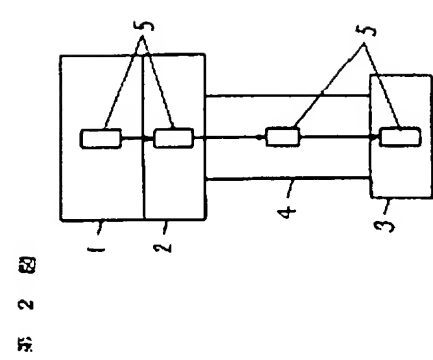
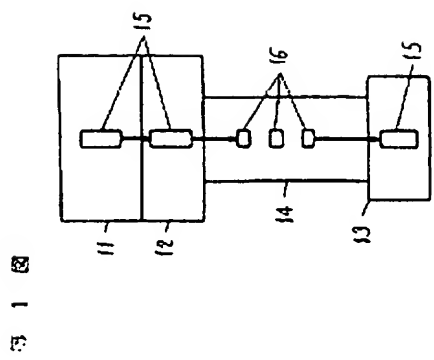
12: communication control device

13: terminal

14: line

15: telegram message

16: part of a telegram message



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